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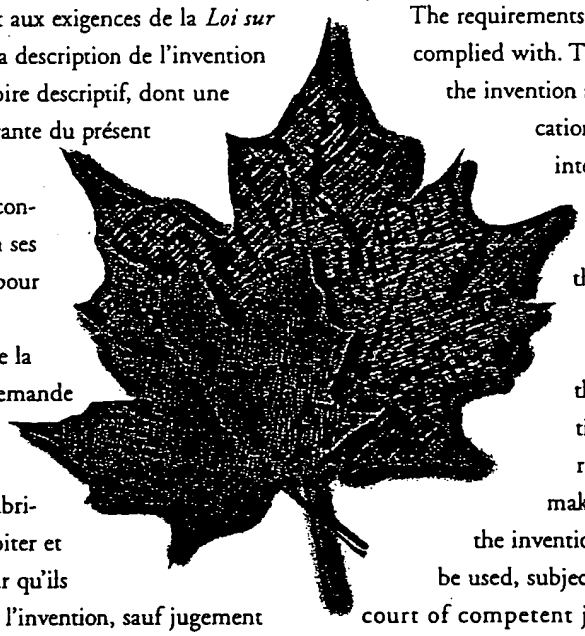
Brevet canadien / Canadian Patent

Le commissaire aux brevets a reçu une demande de délivrance de brevet visant une invention. Ladite requête satisfait aux exigences de la *Loi sur les brevets*. Le titre et la description de l'invention figurent dans le mémoire descriptif, dont une copie fait partie intégrante du présent document.

Le présent brevet confère à son titulaire et à ses représentants légaux, pour une période expirant vingt ans à compter de la date du dépôt de la demande au Canada, le droit, la faculté et le privilège exclusif de fabriquer, construire, exploiter et vendre à d'autres, pour qu'ils l'exploitent, l'objet de l'invention, sauf jugement en l'espèce rendu par un tribunal compétent, et sous réserve du paiement des taxes périodiques.



The Commissioner of Patents has received a petition for the grant of a patent for an invention. The requirements of the *Patent Act* have been complied with. The title and a description of the invention are contained in the specification, a copy of which forms an integral part of this document.

The present patent grants to its owner and to the legal representatives of its owner, for a term which expires twenty years from the filing date of the application in Canada, the exclusive right, privilege and liberty of making, constructing and using the invention and selling it to others to be used, subject to adjudication before any court of competent jurisdiction, and subject to the payment of maintenance fees.

BREVET CANADIEN **2,235,798** CANADIAN PATENT

Date à laquelle le brevet a été accordé et délivré	**2000/07/18**	Date on which the patent was granted and issued
Date du dépôt de la demande	**1998/04/24**	Filing date of the application
Date à laquelle la demande est devenue accessible au public pour consultation	**1998/10/28**	Date on which the application was made available for public inspection

Canada

3256 (CIPO 91)

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CIPO
CANADIAN INTELLECTUAL PROPERTY OFFICE

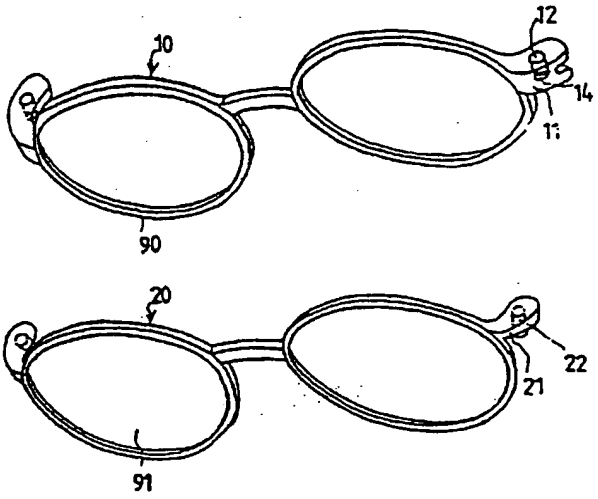
(12) (19) (CA) **Brevet-Patent**

(11) (21) (C) **2,235,798**
(22) 1998/04/24
(43) 1998/10/28
(45) 2000/07/18

(72) CHAO, David YinKai, US
(73) CHAO, David YinKai, US

(51) Int.Cl.[6] G02C 9/00, G02C 7/08
(30) 1997/04/28 (847,708) US

(54) **LUNETTES COMPORTANT UNE MONTURE SECONDAIRE**
(54) **EYEGLASS DEVICE HAVING AUXILIARY FRAME**



(57) An eyeglass device includes a primary frame having two side studs. Each of the studs has a vertically extending bore therein. An auxiliary frame for disposing in front of the primary frame includes two sides each having a hook or pin member for extending over the stud and for engaging with the bore and for securing the auxiliary frame to the primary frame. In one embodiment, each of the studs includes a magnet secured in the bottom portion of the bore and the hook or pin members are made of magnetic material for engaging with the magnets and for securing the auxiliary frame to the primary frame. In another embodiment the pin members engage directly in the bores, without any magnetic interaction.

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to a pair of eyeglasses, and more particularly to a pair of eyeglasses having an auxiliary frame for supporting auxiliary lenses.

2. Description of the Prior Art

The closest prior art of which applicant is aware is US Patent 5,568,207 to Chao, which patent has been assigned to the present applicant. The primary frame of that patent is provided with magnets for magnetically engaging with magnets provided in the auxiliary frame. The auxiliary frame cannot be attached to the spectacle frame if it does not have magnets therein.

The present invention has arisen to provide a novel configuration for securing the auxiliary frame to the primary frame.

SUMMARY OF THE INVENTION

The primary objective of the present invention is to provide an eyeglass device in which each of the side studs of the primary frame includes an opening or bore therein for engaging with a hook, pin or magnet of the auxiliary frame for solidly and stably securing the auxiliary frame to the primary frame.

In accordance with one aspect of the invention there is provided an eyeglass device comprising a primary frame including two sides each having a stud, each of the studs including a bore therein, and an auxiliary frame for disposing in front of the primary frame, the auxiliary frame including two sides each having a pin member for extending over the stud and for engaging with the bore, thereby securing the auxiliary frame to the primary frame.

Preferably, each of the openings or bores includes a bottom portion; each of the studs includes a first magnet secured in the bottom portion of the bore; and the hook or pin members are made of magnetic material for engaging with the first magnets, for thereby securing the auxiliary frame to the primary frame.

Each of the hook or pin members includes an extension extended rearwardly from the side of the auxiliary frame so as to extend toward the primary frame, and each includes a magnetic member extending downwardly for engaging with the opening or bore of the stud, for engaging with the first magnets and for thereby securing the auxiliary frame to the primary frame. The magnetic members are magnets.

Further objectives and advantages of the present invention will become apparent from a careful reading of a detailed description provided hereinbelow, with appropriate reference to the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is an exploded view of an eyeglass device having an auxiliary frame in accordance with the present invention; and

FIG. 2 is a perspective view of the eyeglass device.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to the drawings, an eyeglass device in accordance with the present invention comprises a primary frame 10 for supporting primary lenses 90 and includes two studs 11 formed at the side portions. In one embodiment as illustrated, each of the studs 11 includes a bore or opening 12 and each stud includes a magnet 14 secured in the bottom portion of the bore or opening. Each bore or opening 12 may be oriented so as to be generally normal to the upper surface of the stud 11. An auxiliary frame 20 for supporting auxiliary lenses 91 and for disposing in front of the primary frame includes two extension 21 disposed at the side portions thereof and extending rearwardly for engaging over the studs 11 of the primary frame 10 respectively. In the illustrated embodiment each of the extensions 21 includes a generally vertically oriented magnet 22 for reception in the bore 12 of the stud 11, for engaging with the magnet 14 of the stud 11, and for thereby securing the auxiliary frame 20 to the primary frame 10.

It is to be noted that the extension 21 and the magnet 22 form a hook or pin member for engaging with the bore or opening 12 of the stud 11 and for thereby securing the auxiliary frame 20 to the primary frame 10.

Alternatively, the extension 21 and the magnet 22 may be integrally formed as an L-shaped hook or pin member for engaging the bore or opening 12. The L-shaped hook or pin member is made of magnetic material, such as metal, for engaging with the magnet 14 of the stud 11. Also, it is possible to solidly and stably secure the auxiliary frame to the primary frame with a mechanical engagement of the pin or hook members with the bores of the primary member, without any need for magnetic interaction.

Accordingly, the eyeglass device in accordance with the present invention includes a primary frame having an opening or bore formed in each of the studs for engaging with the hook or pin

member of the auxiliary frame and for solidly and stably securing the auxiliary frame to the primary frame.

Although this invention has been described with a certain degree of particularity, it is to be understood that the present disclosure has been made by way of example only and that numerous changes in the detailed construction and the combination and arrangement of parts may be resorted to without departing from the spirit and scope of the invention as hereinafter claimed.

I CLAIM

1. An eyeglass device comprising:

a primary frame including two sides each having a stud, each of said studs including a bore therein; and

an auxiliary frame for disposing in front of said primary frame, said auxiliary frame including two sides, each having a pin member for extending over said stud and for engaging with said bore, thereby securing said auxiliary frame to said primary frame.

2. An eyeglass device according to claim 1, wherein each of said bores includes a bottom portion, each of said studs includes a magnet secured in said bottom portion of said bore, and said pin members are made of magnetic material for magnetically engaging with said magnets and thereby securing said auxiliary frame to said primary frame.

3. An eyeglass device according to claim 2, wherein each of said pin members includes an extension extended rearwardly from said side of said auxiliary frame and extending toward said primary frame, and each of said pin members includes a magnetic member extending downwardly for engaging with said bore of said stud, for engaging with said magnet and for securing said auxiliary frame to said primary frame.

4. An eyeglass device according to claim 3, wherein said magnetic members are magnets.

5. An eyeglass device according to claim 1 wherein at least a portion of one of the pin members extends into one of said bores for securing said auxiliary frame to said primary frame and is non-magnetic.

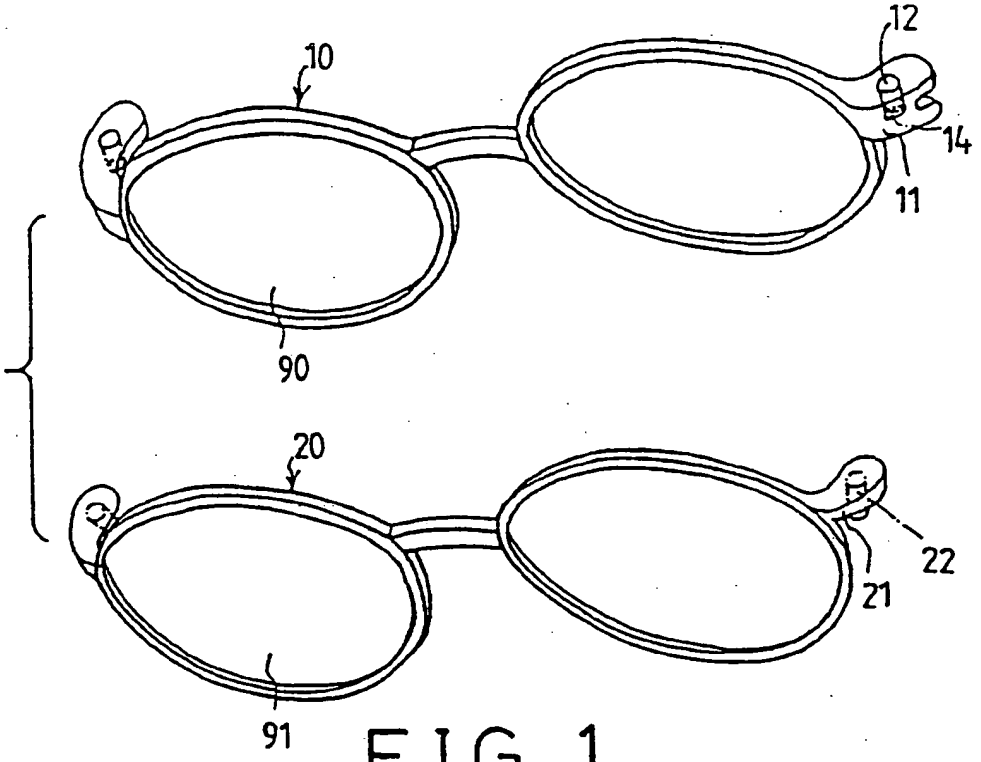


FIG. 1

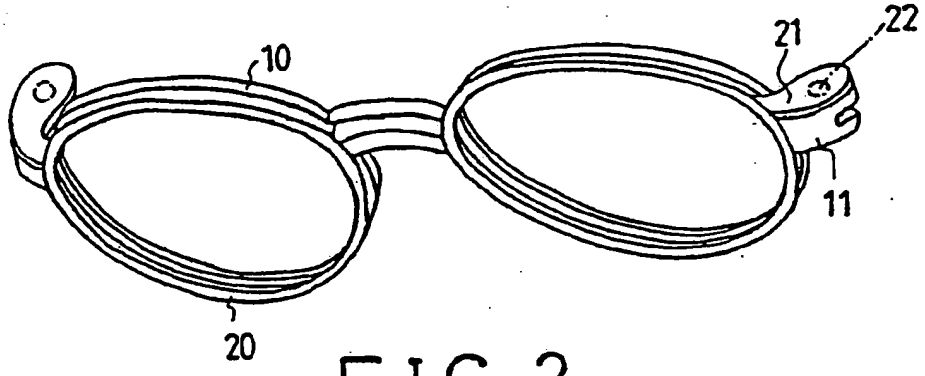


FIG. 2